

## Museum Reform

No one acquainted with the condition of the greater proportion of our provincial museums can do otherwise than confess with sorrow that much of what is alleged against them in the paper of Mr. Boyd Dawkins is too true. While fully concurring in all he says as to the actual state of matters in these amorphous receptacles of curiosities and conceits, and as to the crying need for reform, you will perhaps allow me to make a few comments as to the causes which contribute to keep museum collections in their present disreputable condition, and the means by which they may be worthily organised, and raised to their high and proper position among the educational agencies of the country.

It is necessary in the first place to accept Mr. Boyd Dawkins's glorification of the collecting instinct with some modification or rather amplification of its scope. A man is indeed "poor and much to be pitied" who is not a collector in some sense; but it does not require demonstration that many of the best and greatest benefactors of mankind are not collectors in a way that contributes to the building up of museums. Statesmen, soldiers, poets, philosophers, and orators are not of necessity poor and much to be pitied because they may not devote their leisure to the collection of coleoptera, nor find solace in the beauties of Lucca della Robbia. In nine cases out of ten, indeed, the collector is a person of one idea, and that idea is that the gathering, labelling, and arranging of the objects of his fancy is the beginning, end, and sum of science. He is generally an estimable person; but as regards scientific culture he is quite as well employed in collecting spoiled postage stamps as he would be in gathering together the species of any of the great divisions of the animal kingdom. When we come to the tenth man—the intellectual collector—we find a really scientific worker, but one necessarily confining himself to a limited field. He is in short a man with a hobby, or, to put it more courteously, a specialist. Put a man of this select class in charge of a provincial museum, and while probably he is too wise to speak slightly of any department of human knowledge, he will inevitably develop his own special subject at the expense of all others. A geologist draws towards him rocks and fossils, an entomologist collects in the particular group of insects to which he has given attention, and an archaeologist looks only or mainly for antiquities. If the man is a simple collector of the ordinary type he knows nothing or despises everything beyond his region, and hence in part the jumble of ethnology, art, and science which Mr. Boyd Dawkins so graphically describes.

A specialist, though an indispensable cultivator of science, is a very bad museum curator. A curator should be like a newspaper editor, a man of general knowledge and culture. Unlike an editor, he should belong to no party, but be possessed of catholic sympathies in science and art; ready to accept and use the assistance of specialists, in a way that will subordinate all departments to one harmonious general plan. Further, he should possess an experimental knowledge of the routine duties of a museum, such as can only be obtained by a training or apprenticeship in a well-organised museum.

No provision, I need hardly say, exists at the present time for training young men to museum work, and there is no pecuniary inducement held out for lads to seek curatorial qualifications. The training obtained in the great metropolitan museums is special; and in the government service there is no hiving off of apprentices. Municipal and free library authorities have not yet learnt that a well-equipped museum is an expensive institution, and though many corporation dignitaries may spend annually £,000/- and upwards on purchases for their private collections, it does not occur to them that it is necessary to do more than open the doors of a public museum or art gallery, and allow collections to accumulate, arrange, classify, catalogue, and conserve very much of their own accord. And so we obtain the dusty, misleading, higgeldy-piggeldy which do duty in provincial towns as "museums."

Before these institutions can rise from their present dismal estate it is essential that much more money be devoted to them. Of course it does not matter whence the funds come—from public rates or private benefaction—provided it comes honestly; but there is, as the law now stands, hardly in any town sufficient rating power to build and maintain a museum adequate to the population and wants of the locality. Free library boards with their penny rating limit have in many instances committed themselves to very ambitious mistakes by instituting numerous district libraries, and throwing in a public museum to the bargain, under the delusion either that their penny is like the

wizard's inexhaustible bottle, or that these institutions will live and flourish "without visible means of support." The result is, that while libraries have been crippled and half starved, ratepayers have been justly disgusted with the very name of museum.

The provincial public mind, both official and extra-official, stands sorely in need of enlightenment as to the nature and functions of a museum. The education of opinion on these points is the first step required for the elevation of local museums. With that effected, enlarged rating power, a demand for competent men, and adequate support to institutions on a broad educational basis would soon follow. Local museums, ceasing to be mere curiosity-shops, receptacles of "relics from Sedan," "water from the Jordan," with six-legged cats and similar monstrosities, would become storehouses of well-selected information and material for the use of teachers and investigators, as well as instructive and elevating resorts of the general public.

No class of institutions existing could be made mutually more helpful than museums. Duplicates innumerable go to wreck and destruction in the stores and cellars of almost every museum, while certainly many kindred institutions stand in need of what is simply an encumbrance to some. Similarly with labels and stores of information, each institution at present stands apart, working painfully, and perhaps erringly, at tasks which might well be spared, seeing that it is and has been done over and over again in other institutions. Again, one locality possesses rare and unusual facilities for obtaining particular classes of objects, and that advantage can, by a system of exchange, be made properly beneficial to its own museum by drawing what it needs from others. Further, in these days of comparative infancy, the experience of the officers of the older museums would be of unspeakable value to those struggling amid difficulties of which they barely recognise the nature; and to all, the countenance of the great institutions—which should be prepared to stand more *in loco parentis* than they at present do—and the advice and help of their specialists would be of much advantage. In these days of conferences, associations, and unions, it is manifest that there is room for a conference of museum keepers, and no one can doubt that vast good would result from drawing the officers of museums of all kinds into closer relationship with each other. Will the energetic officers of South Kensington not display once more their organising talent by bringing together such a conference, which, it may be hoped, would result in a permanent union among museum officers.

J. P.

## Taunton College School

MAY I ask the insertion of the following brief remarks:—

The writer of the article in your paper of the 28th on Taunton College School is under some strange misapprehension, which perhaps may account for his unsavourable criticism of the schemes of the Endowed Schools' Commission. He clearly implies, though he does not positively state, that the present disturbance at Taunton (of which I know nothing) and the scandal at Felsted two or three years ago are in some way attributable to the wrong constitution of the governing body, under schemes of the Endowed Schools' Commission.

Taunton College School is not under a scheme of the Endowed Schools' Commission, and no scheme was ever proposed for it by that body. A scheme for Felsted Grammar School was proposed by the Endowed Schools' Commission, with the hearty goodwill of the late master, but was rejected by the House of Lords on the motion of the Bishop of Rochester (now of St. Albans'). The trustees who dismissed Dr. Grignon were the very body whose constitution our scheme proposed largely to modify, and who were in consequence not a little annoyed.

Your writer will, I hope, excuse my saying that he will serve the cause of science and of schools much better if he does not weaken his attacks on the guilty by hitting, or making feints of hitting, at the innocent.

HENRY J. ROBY,  
Late one of the Endowed Schools' Commissioners

Manchester, June 29

## Hog Wallows

I HAVE been watching with some interest the progress of the discussion on the "Hog Wallows" of California, which has been in progress in your paper during nearly all of this year. When a member of the California Geological Survey Corps, I

had numerous opportunities of studying the phenomena in that and the adjoining states of Oregon and Nevada; more especially in the southern parts of the desert. There they are developed on the largest scale, and there their origin is obvious.

Prof. Le Conte's account of them wants but a single word to have settled the question. I attributed them, then, exclusively to the action of the wind, and after reading what others have to say about them, see no reason for changing that opinion. The Professor says, "I attribute them to surface erosion." Had he inserted *aerian*, nothing more would have been wanted; although, since he speaks of weeds and shrubs taking possession of them, subsequent to their formation, he does not seem to have exactly hit on the *rationale* of the process.

One case may serve as an illustration. In the southern end of the Reese River Valley, Nevada, is a broad, perfectly level plain without a water-course; only a few shallow dry gutters show where the rain water runs to scattered spots, where it sinks or evaporates. The region is almost rainless. The plain is covered for many square miles with these mounds, varying up to four or five feet high, and up to twenty, thirty, and even perhaps forty feet in diameter. In every case they are made up of only the finer particles of the soil, the coarser grains and gravel being visible in the interspaces. The dust and sand has in all cases been heaped up in and around a clump of sage bush which continues to grow out of the top of the mound. Little vegetation grows on the flanks of the mounds, and when it does, it forms the nucleus of a subsidiary hillock. The mounds are thus formed by building up, and only the intervening spaces are caused by an erosion, taking place to day, and not caused by water, much less by ice.

Wm. M. GABB

Puerto Plata, Sto. Domingo, June 5

#### Fertilisation of *Salix repens*

DURING May I was watching the movements of the insects on a plant of *Salix repens*, when I noticed some facts which may prove interesting to some of your readers. It was mainly visited by the common hive-bee (*Apis mellifica* ♀) and the humble-bee (*Bombus terrestris* ♀). The former of these flew gaily about from catkin to catkin merely taking one bite at each; but the latter went far more systematically to work; it never flew at all, but crawled in a ludicrously feeble way from catkin to catkin, and once on a catkin it cleared it thoroughly, thrusting its proboscis between every pair of florets. I do not know whether this greater thoroughness is at all times characteristic of the humble-bee as compared with the hive-bee and should much like to be informed. And another thing which I do not understand is, that one of these humble-bees appeared to have two kinds of pollen on its legs, one that of *Salix repens*, the other of a much darker and more-orange colour, though when examined under the microscope the grains proved to be of the same shape.

H. H.

Wellington College, Wokingham, June 30

#### THE FUTURE OF SANITARY SCIENCE— POLITICAL, MEDICAL, SOCIAL<sup>1</sup>

I COULD have wished it had been in my power on the present occasion to produce one of those essays which appeal to the imagination while they prepare the mind for the reception of sanitary principles and practice. Such essays are tempting and, in their place, instructive. To-day I am bound on a voyage less pleasant, yet I hope not less useful.

There has recently been called into existence a new society under whose summons we now meet. The society has assumed to itself the expressive name of the Sanitary Institute of Great Britain. It starts as a voluntary effort by men and women who are willing and anxious to give effect to those teachings of sanitary science which the past half-century has revealed. It invites all who

<sup>1</sup> An address delivered before the Sanitary Institute of Great Britain at the Royal Institution, on July 5, 1877, by Benjamin W. Richardson, M.D., LL.D., F.R.S.

are concerned to utilise the knowledge that has been acquired in that time. It wishes to encourage new research. But it has for its most anxious care to render useful to mankind at large the accumulated store of knowledge which at this moment lies ready for so many grand purposes relating to health. It accepts as its object, work for health, health of all the human family.

Shall some one say the object is ambitious? Yea, we reply, it is confessedly ambitious. Shall some one say the means at command for the work to be attempted are weak? Even so. Life is short, art long. Yet the short yields the long, and but for the short the long could not be. It is out of these littlenesses of human effort that the greatnesses follow. Or, as Benjamin Rush very forcibly puts it, and simply as forcibly: "There are mites in science as well as in charity, and the ultimate results of each are often alike important and beneficial."

It is my fortune, good or bad, to have to preside over the council of this new society. Of the ability of those who form the council, and of their experience, I need not speak in detail, for their names are familiar to the world. They represent, I may say, sanitary science in all its branches, and from them, working harmoniously together, good results must be expected.

It seems fitting therefore as we enter on our work to look forward to the future. It is a part at least of our duty to look towards the future with the view of seeing in what directions we may best proceed; what assistances we may have to call upon; and chiefly what great powers we may have to consult and propitiate.

The three great powers with which our society will have to treat are the political, the medical, the social. From each of these we shall expect constant assistance. To one or other of these, whatever we do, our work will be transmitted or transferred. They will bring it into practical form and effect, or they will reduce it to nothingness. We can suggest and set forth initiatives, and with that our functions are complete in each particular branch to which we address ourselves.

It is our special duty to keep this special fact steadily in view and to limit our labours by it. It too often happens that young societies like young men are apt to believe that they can conduct national processes as easily as they can conceive them, and under this belief fail most signally with the best of attempts. I remember in my early career getting a lesson from one of our late well-known statesmen on this very point. I was explaining to him the efforts I had made in 1855 and the succeeding three years to establish a registration of the diseases of this kingdom, and I bewailed the hard experience which proved that the greater the scientific success of the effort the more impossible it became to carry it out. In fact, said I, in a pitiful strain, the success almost ruined me in mind, body, and estate. "Served you right," was the immediate reply, "Served you right. If individual men could carry out national projects where would be the nation?" The reply was hard as it was unanswerable, and from that time to this I have given up all thoughts of doing more than sowing seed in the field of literature and leaving it to the chance of fructification on that extensive soil; or in showing some mere model of experiment which, perchance, may grow into working form. And this, I think, is the whole natural scope of our Institute,—to sow the